United States Patent [19] [11] Patent Number: 4,609,434 Greene et al. [45] Date of Patent: Sep. 2, 1986 [54] COMPOSITE SHEET PREPARED WITH [56] References Cited STABLE LATEXES CONTAINING U.S. PATENT DOCUMENTS PHOSPHORUS SURFACE GROUPS 4,225,383 9/1980 McReynolds 162/168.1 [75] Inventors: Bettye W. Greene; Sun-Lin Chen, OTHER PUBLICATIONS both of Midland, Mich. McCutcheon's Detergents & Emulsifiers, North Ameri-[73] Assignee: The Dow Chemical Company, can Edition, 1975 Annual, pp. 121 and 122. Midland, Mich. Primary Examiner-Peter Chin [21] Appl. No.: 659,735 **ABSTRACT** [22] Filed: Oct. 11, 1984 A phosphorus modified latex composition useful in the coating of substrates with inorganic fillers. A latex par-Related U.S. Application Data ticle having phosphorus groups intimately bound to the particle's surface formed by the emulsion polymeriza-[62] Division of Ser. No. 562,886, Dec. 19, 1983, Pat. No. tion of a latex with a phosphorus compound. Also a 4,506,057. method of preparing a composite sheet and a paper [51] Int. Cl.⁴ D21H 3/48 coating latex with the phosphorus modified latex is provided. [52] U.S. Cl. 162/168.1; 162/169 [58] Field of Search 162/168.1, 169, 183, 162/164.1, 158 10 Claims, No Drawings